Dr. Duke's Phytochemical and Ethnobotanical Databases Chemicals found in Piper cubeba

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	(+)-4-ISO-PROPYL-1- METHYL-CYCLOHEX-1-EN- 4-OL	Fruit Essent. Oil				
0	(+)-CAR-4-ENE	Fruit Essent. Oil				
0	(+)-CROTEPOXIDE	Fruit		23750.0		
0	(+)-SABINENE	Fruit Essent. Oil				
0	(+)-SESAMIN	Fruit		8000.0		
0	(+)-ZEYLENOL	Fruit		3000.0		
0	(-)-5'-O-METHOXY- HINOKININ	Fruit				
0	(-)-CADINENE	Fruit Essent. Oil				
0	(-)-CLUSIN	Fruit				
0	(-)-CUBEBININ	Fruit				
0	(-)-CUBEBININOLIDE	Fruit				
0	(-)-CUBEBINONE	Fruit				
0	(-)-DI-O-METHYL- THUJAPLICATIN METHYL ETHER	Fruit				
0	(-)-DIHYDRO-CLUSIN	Fruit				
0	(-)-DIHYDRO-CUBEBIN	Fruit				
0	(-)-HINOKININ	Fruit				
0	(-)-ISOYATEIN	Fruit				
0	(-)-YATEIN	Fruit				
0	1,4-CINEOLE	Fruit	300.0	1200.0	1.3842005295366193	
0	1,8-CINEOL	Fruit Essent. Oil		3000.0	-1.0	
67	1,8-CINEOLE	Fruit	700.0	1400.0	-0.34246998715024435	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	1-4-CINEOL	Fruit Essent. Oil				
0	1-ISOPROPYL-4- METHYLENE-7-METHYL- 1,2,3,6,7,8,9- HEPTAHYDRO	Plant				

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	10-(ALPHA)-CADINOL	Fruit	1000.0	2000.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	2,4,5- TRIMETHOXYBENZALDEHY DE	Fruit				
0	3(R)-3'-4'-DIMETHOXY- BENZYL-2(R)-3'-4'- METHYLENEDIOXY- BENZYL-BUTYROLACTONE	Fruit				
0	ALLO-AROMADENDRENE	Fruit Essent. Oil		50000.0	-1.0	
0	ALLO-AROMADENDRENE	Fruit	4200.0	8400.0	1.721933974030651	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-CUBEBENE	Fruit Essent. Oil		51000.0	1.0	
0	ALPHA-CUBEBENE	Fruit	7100.0	14200.0	0.3923703846712794	
0	ALPHA-MUUROLENE	Fruit	1200.0	2400.0	1.9504962573662254	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ALPHA-O-ETHYL-CUBEBIN	Fruit				
11	ALPHA-PHELLANDRENE	Fruit Essent. Oil				
11	ALPHA-PHELLANDRENE	Plant				
11	ALPHA-PHELLANDRENE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
28	ALPHA-PINENE	Fruit Essent. Oil	3000.0	130000.0	0.871725782335278	
28	ALPHA-PINENE	Fruit	1100.0	2200.0	-0.1444064964278331	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	ALPHA-TERPINENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
13	ALPHA-TERPINENE	Fruit Essent. Oil				
23	ALPHA-TERPINEOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	ALPHA-THUJENE	Fruit Essent. Oil	120000.0	130000.0	1.694415544579461	
0	ALPHA-THUJENE	Fruit	1100.0	2200.0	1.4401949119825743	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
20	APIOLE	Fruit	300.0	600.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
15	ASARONE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	ASCHANTIN	Fruit		2000.0		
10	AZULENE	Fruit				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
6	BETA-BISABOLENE	Fruit Essent. Oil		20000.0	-1.0	
6	BETA-BISABOLENE	Fruit	1500.0	3000.0	1.5972151266971657	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Fruit Essent. Oil		34000.0	-0.40802833391075616	
0	BETA-CUBEBENE	Fruit Essent. Oil		2000.0		
0	BETA-CUBEBENE	Fruit	11000.0	22000.0	1.4142135349613263	
5	BETA-ELEMENE	Fruit Essent. Oil		10000.0	-0.16391702274241896	
5	BETA-ELEMENE	Fruit	1200.0	2400.0	2.7200166626234608	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-O-ETHYL-CUBEBIN	Fruit				
3	BETA-PHELLANDRENE	Fruit Essent. Oil	120000.0	130000.0	1.7285017610948525	
3	BETA-PHELLANDRENE	Fruit				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	BETA-PINENE	Fruit Essent. Oil				

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
13	BETA-PINENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	BICYCLOSESQUIPHELLAN DRENE	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	BICYCLOSESQUIPHELLAN DRENE	Essential Oil				
0	CADINA-1-9(15)-DIENE	Essential Oil				
4	CADINENE	Fruit Essent. Oil	40000.0	140000.0		
0	CALAMENE	Fruit Essent. Oil		10000.0		
0	CALAMENENE	Fruit	3700.0	7400.0	1.9727572242759401	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Fruit	3700.0	7400.0	-0.17554872486616202	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CESARONE	Fruit	3700.0	4700.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	CINEOL	Fruit Essent. Oil				
1	COPAENE	Essential Oil				
1	COPAENE	Fruit	10400.0	20800.0	1.4142132859705265	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	COPAENE	Fruit Essent. Oil		81000.0		
1	CUBEBIC-ACID	Fruit	10000.0	17000.0		
3	CUBEBIN	Fruit		25000.0		
0	CUBEBINOLIDE	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
0	CUBEBOL	Fruit Essent. Oil		309000.0		
0	CUBEBOL	Fruit	10000.0	20000.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
0	CUBENOL	Fruit	1750.0	3500.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	D-DELTA-4-CARENE	Fruit	300.0	1200.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
19	D-LIMONENE	Fruit Essent. Oil				
9	DELTA-CADINENE	Fruit	8800.0	17600.0	2.235154229296806	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	DILLAPIOLE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
7	DIPENTENE	Fruit				
0	EO	Fruit	50000.0	200000.0	3.067440392195637	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EO	Fruit Essent. Oil		118500.0		
0	EPICUBENOL	Fruit	1750.0	3500.0	1.0	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	EPICUBENOL	Fruit Essent. Oil				
0	GAMMA-HUMULENE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	GAMMA-TERPINENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
11	GAMMA-TERPINENE	Fruit Essent. Oil				
0	GUM	Fruit		80000.0	1.0	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	HEMI-ARIENSIN	Fruit				
0	HETEROTROPAN	Fruit				

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
2	HUMULENE	Fruit Essent. Oil		42000.0		
0	L-CADINOL	Fruit	150.0	600.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	LEDOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
60	LIMONENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
0	LINALOL	Fruit				
53	LINALOOL	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	MANOSALIN	Fruit				
0	MUUROLENE	Fruit Essent. Oil		17000.0		
22	MYRCENE	Fruit Essent. Oil				
22	MYRCENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
11	NEROLIDOL	Fruit Essent. Oil		36000.0		
11	NEROLIDOL	Fruit	3500.0	7000.0	1.7048213219136141	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OCIMENE	Fruit				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
2	OCIMENE	Fruit Essent. Oil				
16	P-CYMENE	Fruit Essent. Oil				
0	PIPERENOL A	Fruit		1500.0		
0	PIPERENOL B	Fruit		500.0		

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
10	PIPERIDINE	Fruit	1400.0	2600.0	0.6666458822391316	
61	PIPERINE	Fruit	2000.0	4000.0	-1.0	
0	RESINOIDS	Fruit	64000.0	85000.0		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	RESINS	Fruit	30000.0	37000.0	-1.0	Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
5	SABINENE	Fruit	4600.0	9200.0	2.3540011472046185	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	SABINENE	Fruit Essent. Oil	7000.0	470000.0	2.0355115924066247	
5	SABINOL	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
29	SAFROLE	Fruit				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
18	TERPINEOL	Fruit Essent. Oil		23000.0	-1.0	
9	TERPINOLENE	Fruit Essent. Oil				
0	TRANS-TERPINENE	Fruit Essent. Oil				